

City of Fort Worth, Texas

Job Description

Classification Title	Professional Engineer		
Job Code:	PR2070	Job Family:	Professional
Pay Grade	611	Date Created:	07/15/15
FLSA Status	Exempt	Date Revised:	

GENERAL SUMMARY

Performs project and program management duties and professional civil engineering work. Plans, designs, inspections and administers contracts of infrastructure improvement programs and projects, including water and wastewater treatment, water distribution, wastewater collection, street and storm drain, traffic engineering, transportation improvement; and coordinates programs and projects with other City departments and outside agencies.

ESSENTIAL DUTIES & RESPONSIBILITIES

The intent of this job description is to provide a representative summary of the major duties and responsibilities performed by incumbents of this job. Incumbents may be requested to perform job-related tasks other than those specifically presented in this description.

1. Performs project management duties and professional civil and transportation engineering work, including the planning, design, inspection, and contract administration of infrastructure improvement programs and ongoing operations.
2. Provides professional engineering expertise in the design and construction of major civil engineering projects; and reviews, evaluates and approves engineering and construction documents, including drawings, plans, designs, contract documents, technical specifications, cost estimates, environmental documents and related reports.
3. Establishes design criteria to be used by project staff and/or outside consultants on assigned capital improvement projects.
4. Administers assigned projects; monitors work progress; maintains project records; drafts professional consultant agreements; and monitors contract compliance.
5. Prepares special engineering studies and reports; conducts comprehensive studies for planning future expansions, including streets, traffic mitigation improvements, utilities, flood control systems and other public works projects.
6. Conducts site inspections to ensure contractor compliance with design, plans and specifications; investigates field/constructability problems; reviews, estimates and negotiates change orders; conducts construction progress meetings; and prepares progress reports.
7. Provides information and support to developers, builders, contractors and the general public pertaining to City engineering policies and procedures.

8. Prepares requests for proposals and bids; attends pre-bid meetings to clarify project scope; reviews contract bids and proposals; and assists in the coordination and review of consultants' design work.
9. Participates in the selection of consultants and contractors; and negotiates, prepares and administers assigned contracts.
10. Participates in a variety of professional meetings and conferences.
11. Performs other related duties as required.
12. Adheres to assigned work schedule as outlined in the Department and City attendance policies and procedures; ensures all behaviors comply with the City's Personnel Rules and Regulations.

KNOWLEDGE, SKILLS & ABILITIES

- Knowledge of:
 - Operational characteristics, services and activities of the infrastructure systems and applicable design standards of assigned area of responsibility.
 - Principles, practices, methods and techniques of construction engineering and materials.
 - Principles, practices, methods and techniques of plant processing, optimization and testing.
 - Recent developments, current literature, and sources of information in assigned engineering field.
 - Complex principles and practices of civil engineering.
 - Water distribution system.
 - Terminology, methods, practices, and techniques used in technical civil engineering report preparation.
 - Office equipment including computers and supporting word processing and spreadsheet applications.
 - Advanced mathematical principles.
 - Platting requirements for providing water and sanitary sewer service.
 - Texas Commission on Environmental Quality Standards.
 - Hydrology and hydraulics.
 - City of Fort Worth design and construction specifications.
 - Pertinent Federal, State, and local laws, codes and regulations.
- Skill in:
 - Customer service.
 - Computers and applicable software.
 - Organization and time management.
 - Interpersonal relations.
 - Troubleshooting.
- Ability to:
 - Communicate clearly and effectively, both orally and in writing.
 - Direct and coordinate various City engineering programs and projects.

- Work with citizens and citizen groups in solving complex transportation engineering and civil engineering problems.
- Perform civil engineering design, inspection or contract administration of infrastructure improvements in the assigned area of responsibility.
- Interpret and apply pertinent Federal, state, and local laws, codes, rules, and regulations.
- Develop, review and modify complex engineering plans, designs, and specifications.
- Ensure project compliance with appropriate Federal, state, and local laws, codes and regulations.
- Perform research and solve engineering problems.
- Enforce compliance with pertinent laws and regulations.
- Troubleshoot complex systems in treatment process.
- Prepare, review and evaluate construction bids, cost estimates, change orders and related financial impact analyses.
- Prepare clear and concise reports.
- Establish and maintain effective working relationships.

QUALIFICATIONS

Minimum:

An equivalent combination of education and experience sufficient to perform the essential duties of the position may qualify; Human Resources Department will determine appropriate qualifications. A typical way to obtain the minimum requirements would be:

Bachelor's degree from an accredited college or university with major course work in civil engineering or a related field and four years of increasingly responsible civil engineering experience, including two years in the assigned area of responsibility.

OTHER REQUIREMENTS

Possession of registration as a Professional Engineer in the State of Texas. If licensed in another state, continued employment will be contingent upon obtaining registration as a Professional Engineer within the State of Texas within six months of employment.

Valid Texas driver's license.

WORKING CONDITIONS

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Depending on assignment, positions in this class typically require touching, talking, hearing, seeing, grasping, standing, stooping, kneeling, crouching, reaching, walking, repetitive motions, climbing and balancing.

PHYSICAL DEMANDS

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

Light Work – Depending on assignment, positions in this class typically exert up to 20 pounds of force occasionally, up to 10 pounds of force frequently, and/or a negligible amount of force constantly having to move objects. If the use of arm and/or leg controls requires exertion of forces greater than that for the Sedentary Work category and the worker sits most of the time, the job is rated Light Work.